REMARKS/ARGUMENTS

As a preliminary matter, the Examiner has alleges that the oath is defective as it lacks the inventor's signature. Upon review of the image file history, it appears that the Patent Office has lost the second page of the duly executed declaration filed on August 27, 2004 in response to the Notice to File Missing Parts. A copy of the declaration executed by the inventor is attached.

Claims 1-30 are currently pending in the application. Claims 19, 24, 25 and 30 have been objected to as allegedly lacking antecedent basis for certain claim terms. Claims 1, 2, 7, 9-11, 13, 14, 16, 17, 20-22, 27 and 30 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,459,682 issued to Ellesson et al. Claims 3, 4, 8 and 28 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of Ellesson. Claims 5, 6, 12, 15, 18, 19, 23-26 and 29 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Ellesson in view of U.S. Patent No. 6,502,131 issued to Vaid et al.

Applicants respectfully traverse the rejections set forth above. As to the objections to claims 19, 25 and 25, Applicant has amended the claims to address the objections of the Examiner. However, as to claim 30, antecedent basis for the "second network" is found in the recitation of elements corresponding to the customer site. Applicant respectfully requests withdrawal of the Examiner's objections.

In addition, Applicant has amended claim 1 as follows:

1. A system allowing for centralized, network application performance management services, comprising:

a wide area network maintained by a network service provider,

a customer site comprising a first network,

an access link between the wide area network and the first network of the customer site,

a managed network operations center operably connected to the wide area network, the managed network operations center operative to monitor the wide area network,

and, a bandwidth management device, residing at the customer site, and operably connected to the access link;

wherein the bandwidth management device is operable to monitor network traffic traversing the access link in relation to bandwidth utilization and application performance and transmit data related to the network traffic to the managed network operations center;

wherein the bandwidth management device is operable to control the outbound and inbound flow of network traffic across the access link based on a set

of bandwidth management policies; and,
wherein the managed network operations center is operable to apply to the bandwidth management device a set of bandwidth management policies based on application performance priorities received from the customer site.

Claims 16 and 30 has been amended in a manner similar to claim 1. Claim 17 has been amended to include that the bandwidth management device is operable to apply a set of bandwidth management policies to outbound and inbound network traffic traversing the access link. Claim 23 has amended to state that the new set of bandwidth management policies are applied to the bandwidth management device disposed on the transmission link. Claim 27 has been amended to clarify the relation between the plurality of bandwidth management devices and the customer sites, and to state that the bandwidth management devices are operative to control outbound and inbound traffic across the access links. Claim 26 has been canceled. Claim 31 has been added.

The Examiner primarily uses U.S. Patent No. 6,459,682 issued to Ellesson et al. to reject the pending claims. However, as discussed below, Ellesson, either alone or in combination with other cited references, fails to disclose or suggest the claimed invention.

U.S. Patent No. 6,459,682 issued to Ellesson et al.

Ellesson discloses a network architecture that supports the implementation of service level agreements across an IP backbone network. The network architecture generally comprises edge devices E1 and E2, routing nodes R1, a control server and a directory server. Network traffic statistics and performance data, such as delay and loss rates, are collected at intermediate nodes (e.g., edge devices E1 and E2) in the operator network 10. The control server receives and processes the network statistic and performance data to determine flow rates for different priorities of traffic, determines the allocation of network backbone bandwidth, informs the edge devices E1 and E2 of the pacing that must be done for various channels through the network. Col. 6:28-38. A static directory node is used to look up inter-node connections and determine initial traffic classes corresponding to those connections. It maintains information that allows for 1) mapping of traffic to a service class; 2) mapping of service classes to performance requirements, as well as 3) information relating to network topology and the state of the communications channels in the network. Col. 7:31-38.

According to Ellesson, an edge device E1 (or E2) "is a module that interfaces a customer premise network with the backbone network," Col. 3:55-57, and "play the role of adapting the traffic entering the backbone network to the specific capabilities provided by the network in order to ensure that the SLA conditions are met efficiently." Col. 3:65-4:2. According to Ellesson, "all packets originating in one customer premise network and destined for another pass through two Edge Devices components; i.e., the ingress Edge Device E1 at the interface between the backbone network and the source customer premise network A1, and the egress Edge Device E2 at the interface between the backbone network and the destination customer premise network A2." Col. 4:5-12. Furthermore, the edge devices perform classification of the packets they intercept, such as determining the egress edge device, Col. 4:45-51; determining the path across the backbone network, Col. 4:52-54; determining a class of service for the packets, Col. 4:55-61; determining a channel for the packet, Col. 4:62-67; and, assigning a packet to a corresponding flow, Col. 5:3-6.

The control of packet flows into the network backbone can be effected in two ways. In a first manner, the edge devices change some aspect of the packets (e.g., TOS markings, encapsulation, etc.) such that they receive the appropriate class of service across the backbone network. Col. 5:7-31. The edge devices E1 and E2 can also pace the flow of traffic into the backbone network in a manner dictated by the control server. See Col. 6:28-38. Notably, the edge devices E1 and E2 only control the flow of packets across the backbone network, but do not affect the flow of packets across the link from the customer premise network A1 before it reaches the edge device E1, or the flow of data to the destination customer premise network A2 after it leaves edge device E2. Rather, as discussed above, a given edge device merely transforms packets coming into the network backbone (Col. 5:7-10), pacing/policing their entry into the backbone network (Col. 5:55-62), and restoring packets transformed by another edge device (Col. 5:24-31).

Lastly, the Ellesson patent maintains a clear and distinct boundary between the customer's network and the backbone network and other aspects of the network operator 10. For example, Figures 1A and 1B clearly set forth the demarcation between the network operator's facility and the customer premise networks A1 and A2. Other teachings in Ellesson further support this distinction. For example, the directory server maintains customer data including the edge device interfaces on which packets transmitted from a customer site may be received. See Col. 7:50-56.

The directory server also maintains an "Interface category 22" that identifies an interface through which a customer may send its traffic. See Col. 7:57-62.

Ellesson does not disclose or suggest the subject matter of claims 1, 16, 17, 27 and 30, as amended. For example, Ellesson does not disclose an access link disposed between a service provider network and a customer's network, and a bandwidth management device operative to apply a set of bandwidth management policies to outbound and inbound network traffic traversing the access link, where a managed network operations center is operable to apply to the bandwidth management device a set of bandwidth management policies based on application performance priorities received from an enterprise customer associated with the customer site. Rather, as discussed above, Ellesson discloses a SLA network architecture including edge devices that adapt/pace network traffic for entry onto a backbone network. Ellesson does not disclose, however, a bandwidth management device that applies bandwidth management policies to data flows traversing an access link in both directions between a first customer network (e.g., customer premise network A1 in Ellesson) and the service provider network (e.g., network operator 10 or backbone network in Ellesson). Indeed, Ellesson is silent as to whether network policies are applied to network traffic flowing on the access link between the edge devices and the customer premise networks. Further, the edge devices in Ellesson are operative to pace or control the data flows in only a single direction—that is, as they enter the network backbone. Furthermore, Ellesson does not disclose a bandwidth management device that resides at the customer site. Rather, as discussed above, the edge devices E1 and E2 of Ellesson reside at the edge of the service provider's network and, thus, do not have the ability to pace or otherwise control the flow of data entering the access link from the customer network. Still further, and in reference to claim 30, Ellesson does not disclose a bandwidth management device disposed between the customer's (second) network and the routing device of the customer site.

Applicant further directs the Examiner to claim 13, as amended, which states that the bandwidth management device comprises a customer portal facilitating configuration of the set of bandwidth management policies, and wherein the managed network operations center comprises a device manager server operative to receive configuration requests from the customer site and

configure the set of bandwidth management policies on the bandwidth management device via the customer portal. Claim 15, as amended, states that the managed network operations center is operative to maintain a division between the bandwidth management policies configurable by the customer site and the bandwidth management policies configurable by the network service provider. Ellesson, alone or in combination with Vaid, does not disclose the claimed "customer portal" functionality disclosed and claimed.

In light of the foregoing, Applicant believes that all currently pending claims are presently in condition for allowance. Applicant respectfully requests a timely Notice of Allowance be issued in this case. If the Examiner believes that any further action by Applicant is necessary to place this application in condition for allowance, Applicants request a telephone conference with the undersigned at the telephone number set forth below.

Respectfully Submitted,
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By

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